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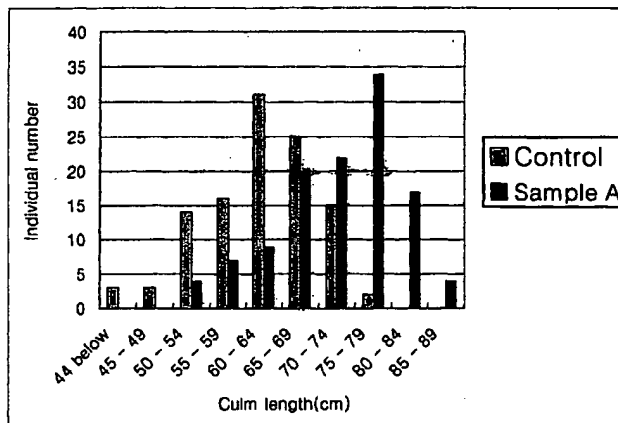
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570-201 Iksan-city, Jeonrabuk-do (KR). **CHOI, Hyoung-Song** [KR/KR]; #101-105, Seogok Dusan APT, 1483-2 22/3 Hyoja-dong 3-ga, Wansan-gu, 560-870 Jeonju (KR).
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- (71) Applicant and
(72) Inventor: **CHOI, Kwang-Soo** [KR/KR]; #2-801, Lotte APT, 414 Hyoja-dong 1-ga, Wansan-gu, 560-857 Jeonju (KR).
- (72) Inventors; and
(75) Inventors/Applicants (*for US only*): **LEE, Sang-Hoon** [KR/KR]; #503-101, Jugong APT 3, Eoyang-dong,

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(54) Title: THE LIQUID COMPOSITION FOR PROMOTING PLANT GROWTH, WHICH INCLUDES NANO-PARTICLE TITANIUM DIOXIDE



(57) **Abstract:** The present invention relates to a liquid composition for promoting plant growth, which contains titanium dioxide nanoparticles. The composition contains, as a main component, an aqueous solution containing titanium dioxide colloids. The titanium dioxide nanoparticles have such a particle size that they can be readily absorbed to plants. A pH of the aqueous solution is adjusted in order to prevent rapid precipitation of the titanium dioxide nanoparticles in the aqueous solution, before the aqueous solution is diluted with water such that titanium dioxide has a desired concentration. Also, the composition contains adjuvants necessary for plant growth and a surfactant for dispersion. The composition allows crop yield to be increased by increasing the photosynthetic efficiency of plants, and permits increasing the bactericidal activity of plants against plant pathogens. Furthermore, the composition permits improving a problem of environmental contamination caused by the excessive use of biochemical fertilizers, and also contributes to an increase in farmer income.



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